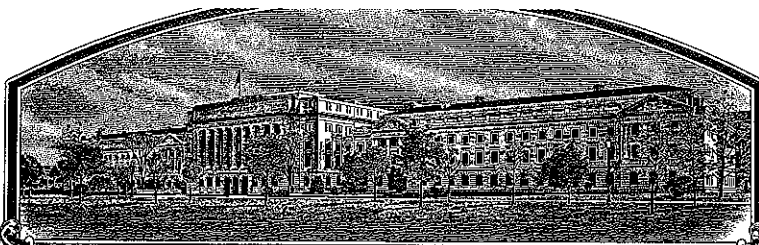


No.

200500144



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

West Bred, LLC

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'Nick'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this sixth day of March, in the year two thousand and six.

Attest:

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER <b>WestBred, LLC</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME <b>BZ 698-31</b>	3. VARIETY NAME <b>Nick</b>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>8111 Timberline Drive Bozeman, MT 59718-8184 USA</b>		5. TELEPHONE (include area code) <b>(406) 587-1218</b>	FOR OFFICIAL USE ONLY PVPO NUMBER <b>200500144</b> FILING DATE <b>Feb 22, 2005</b>
		6. FAX (include area code) <b>(406) 586-8247</b>	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) <b>Limited Liability Company</b>	8. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>AZ</b>	9. DATE OF INCORPORATION <b>August 4, 2003</b>	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <b>Dr. Dale R. Clark WestBred, LLC 8111 Timberline Drive Bozeman, MT 59718-8184</b>		FILING AND EXAMINATION FEES: \$ <b>3652.00</b> DATE <b>2/22/2005</b> CERTIFICATION FEE: \$ <b>768.00</b> DATE <b>02/10/2006</b>	
11. TELEPHONE (include area code) <b>(406) 587-1218</b>	12. FAX (include area code) <b>(406) 586-8247</b>	13. E-MAIL <b>dclark@westbred.com</b>	
14. CROP KIND (Common Name) <b>Wheat</b>	16. FAMILY NAME (Botanical) <b>Poaceae</b>	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP <b>Triticum aestivum</b>	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.  The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.  Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	

SIGNATURE OF OWNER 		SIGNATURE OF OWNER 	
NAME (Please print or type) <b>Dale R. Clark</b>		NAME (Please print or type) <b>Dan R Biggerstaff</b>	
CAPACITY OR TITLE <b>Binley, &amp; Wheat Breeder</b>	DATE <b>02/21/2005</b>	CAPACITY OR TITLE <b>Vice President</b>	DATE <b>02/21/2005</b>

(See reverse for instructions and information collection burden statement)

## INSTRUCTIONS

200500144

**GENERAL:** To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

**Plant Variety Protection Office**

**Telephone: (301) 504-5518**

**FAX: (301) 504-5291**

**Homepage:** <http://www.ams.usda.gov/science/pvpo/pvpindex.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

## ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;  
(2) the details of subsequent stages of selection and multiplication;  
(3) evidence of uniformity and stability; and  
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

**22. CONTINUED FROM FRONT** (Please provide a statement as to the limitation and sequence of generations that may be certified.)

**23. CONTINUED FROM FRONT** (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

March 2004

**24. CONTINUED FROM FRONT** (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**“Nick”**  
Soft White Spring Wheat

**16.a. Exhibit A. Origin and Breeding History**

“Nick” (Exp. # BZ 698-31) is a soft white spring wheat that originated from the cross of “BZ692-11 / (Wakanz/Vanna F1)”, made near Phoenix, AZ, in March, 1995. BZ692-11 is a two gene semi-dwarf that originated from the cross ‘Sprite/Discovery’, both Sprite and Discovery were released by Western Plant Breeders and were only grown for a few years. The F1 plants were grown near Bozeman, MT during the summer of 1995 and the F2 seed was harvested in September 1991. The F2 seed was planted near Yuma in November, 1995. Due to the restrictions placed on Arizona wheat in 1996 after the discovery of Karnal bunt, this material was abandoned and remnant F2 seed was planted near Bozeman, MT in May, 1996. Single F2 heads were harvested in September, 1996. F2 heads were planted in rows near Bozeman, MT in May, 1997. Heads were selected from agronomically acceptable F3 rows were and were planted back as F3 head rows near Bozeman, MT in May, 1998. In September, agronomically acceptable rows were selected, harvested and quality analysis was performed on the grain. One such selected row was given the designation ‘BZ 698-31’. Protein and protein quality (the SDS sedimentation test) analysis for cookie & cake (pastry) type quality were conducted on selected lines prior to advancing to yield trials. Yield trials, along with quality analysis, were conducted on the F4 thru F9 generations in WestBred, LLC Pacific Northwest spring wheat trials from 1999-2005. Besides being selected for low protein, low sedimentation levels, high cookie spread and high yield, Nick was also evaluated and selected for suitable agronomic characteristics (see Table 1.) such as, plant height, resistance to lodging, and most importantly, resistance/tolerance to the Pacific Northwest biotypes of Hessian fly and the current races of stripe rust, mildew and leaf rust. The milling and baking quality of Nick was evaluated by the 2003 Pacific Northwest Wheat Quality Council and was found to be an acceptable variety of soft white wheat. Table 2 gives quality scores for Nick compared to check varieties of soft white spring wheat.

Heads were selected from an F5 plot in the fall of 2000 and planted as head rows near Bozeman in the spring of 2001. Uniform head rows were individually harvested and tested for quality. Uniform selections were planted as individual 5’x 40’ F6 plots in the fall of 2001 near Yuma,



WestBred, LLC, 8111 Timberline Dr., Bozeman, MT 59718

## “Nick” Soft White Spring Wheat

Arizona. Since all plots were uniform, they were harvested in bulk and designed ‘Breeders Seed’. This Breeders seed was used to plant eight acres near Bozeman in May 2002. Seed of this production was harvested in September, 2002 as ‘Foundation’ seed. Foundation seed was planted in the spring of 2003 to produce Registered and Certified seed. The first unencumbered sale of Nick occurred in March, 2004.

A variant that is similar to “Nick”, but is 4 to 8 inches taller, occurs at a frequency of up to .15% (15 per 10,000 plants). Also, a red seed variant occurs at a frequency of up to .04% (4 per 10,000 seed), and a red chaffed variant may occur at a frequency of up to .01 (1 per 10,000 plants). Otherwise, “Nick” is a stable and uniform variety in appearance and performance across several generations (F4 to F9) and growing conditions.

The name Nick was given to this variety because it was the first variety WestBred, LLC has released, which has the variety Vanna in its parentage. The soft white variety Vanna was named after a popular game show host, whose first child was named Nicolas.

Table 1. Agronomic data for Nick, compared to check varieties in Washington State Extension Soft White Spring Wheat Trials over 51 location years (2001-2004).

Variety	Days to Head	Plant Height (inches)	Test Wt lbs/bu	Protein %	Yield bu/ac
<b>NICK</b>	<b>71</b>	29	58.5	12.2	<b>54.9</b>
ALPOWA	73	30	59.0	11.9	54.2
ALTURUS	72	29	58.2	11.7	53.0
WAWAWAI	72	33	58.9	12.2	51.6
ZAK	74	30	57.5	12.6	48.8
CHALLIS	73	30	58.0	11.8	48.4
EDWALL	72	29	54.5	12.0	45.1
PENAWAWA	73	27	57.5	12.1	45.1



**"Nick"**  
Soft White Spring Wheat

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Table 2. Quality analysis (*t*-scores) of Nick compared to currently grown varieties of soft white spring wheat in Washington State University Trials. Analysis performed by USDA/ARS Western Wheat Quality Lab in Pullman, WA. (2001 - 2002 samples)

<u>Variety</u>	<u><i>t</i> values</u>				<u>score</u>
	<u>Grain</u>	<u>Milling</u>	<u>End Product</u>		
Edwall	-4.45	0.77	2.68		6.68
Zak	-1.37	3.21	9.12		5.70
Chalis	3.04	3.34	5.15		4.21
Alturas	0.59	5.74	2.70		3.70
<b>Nick</b>	<b>-1.13</b>	<b>2.02</b>	<b>4.05</b>		<b>2.72</b>
Wakanz	-3.06	-0.30	4.87		2.01
Wawawai	-0.50	2.23	1.71		1.24
Alpowa	0.00	0.00	0.00		0.00
Penawawa	-2.33	-5.36	0.09		-1.91

Note: Student's *t* is calculated for each variety compared to the check variety 'Alpowa'. Positive values of *t* indicate the test variety has a value greater than the check and negative values indicate that the test variety value is less than the check.

Nick was compared with Alpowa in 12 location/years of samples.

### **16.b. Exhibit B. Statement of Distinctness**

Nick is most similar to the variety Challis. However, Nick has a square glume shoulder whereas Challis has elevated shoulders, and Nick has anthocyanin present in its stems, whereas Challis does not. The above comparison, along with the complete Objective Description (Exhibit C) shows Nick to be a novel variety of soft white spring wheat.



WestBred, LLC, 8111 Timberline Dr., Bozeman, MT 59718

REPRODUCE LOCALLY. Include form number and date on all reproductions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Form Approved OMB NO 0581-0055

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U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY  
Wheat (*Triticum* spp.)

NAME OF APPLICANT (S) WestBred, LLC	TEMPORARY OR EXPERIMENTAL DESIGNATION BZ 698-31	VARIETY NAME Nick
ADDRESS (Street and No., or RD No., City, State, Zip Code and Country) 8111 Timberline Drive Bozeman, MT 59718-8181 USA		FOR OFFICIAL USE ONLY PVPO NUMBER 2005 00144

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g.,    or   ) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: \_\_\_\_\_ . Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

- 1 = Common  
2 = Durum  
3 = Club  
4 = Other (Specify) \_\_\_\_\_

2. VERNALIZATION:

- 1 = Spring  
2 = Winter  
3 = Other (Specify) \_\_\_\_\_

3. COLEOPTILE ANTHOCYANIN:

- 1 = Absent 2 = Present

4. JUVENILE PLANT GROWTH:

- 1 = Prostrate 2 = Semi-erect 3 = Erect

5. PLANT COLOR: (boot stage)

- 1 = Yellow-Green  
2 = Green  
3 = Blue-Green

6. FLAG LEAF: (boot stage)

- 1 = Erect 2 = Recurved  
 1 = Not Twisted 2 = Twisted  
 1 = Wax Absent 2 = Wax Present

7. EAR EMERGENCE:

Number of Days (Average)

Number of Days Earlier Than

\* Jubilee

Same As

\* Hank

Number of Days Later Than

\* Tara 2002

\*Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

8. ANTHOR COLOR:

1 = Yellow 2 = Purple

**9. PLANT HEIGHT:** (from soil to top of head, excluding awns)

0 6 9

cm (Average)

0 3

cm Taller Than

Challis

\*

Same As

Hank

\*

0 3

cm Shorter Than

Jubilee

\*

**10. STEM:****A. ANTHOCYANIN**

2

1 = Absent 2 = Present

**B. WAXY BLOOM**

2

1 = Absent 2 = Present

**C. HAIRINESS** (last internode of rachis)

2

1 = Absent 2 = Present

**D. INTERNODE**

1

1 = Hollow

2 = Semi-solid

3 = Solid

4

Number of Nodes

**E. PEDUNCLE**

1

1 = Erect

2 = Recurved

3 = Semi-erect

2 6

cm Length

**F. AURICLE**

2

Anthocyanin:

1 = Absent

2 = Present

2

Hair:

1 = Absent

2 = Present

**11. HEAD: (At Maturity)****A. DENSITY**

2

1 = Lax

2 = Middense (Laxidense)

3 = Dense

**B. SHAPE**

2

1 = Tapering

2 = Strap

3 = Clavate

4 = Other (Specify) \_\_\_\_\_

**C. CURVATURE**

2

1 = Erect

2 = Inclined

3 = Recurved

**D. AWNEDNESS**

4

1 = Awnless

2 = Apically Awnletted

3 = Awnletted

4 = Awned

**12. GLUMES: (At Maturity)****A. COLOR**

1

1 = White

2 = Tan

3 = Other (Specify) \_\_\_\_\_

**B. SHOULDER**

4

1 = Wanting

2 = Oblique

3 = Rounded

4 = Square

5 = Elevated

6 = Apiculate

7 = Other (Specify) \_\_\_\_\_

**C. SHOULDER WIDTH**

2

1 = Narrow

2 = Medium

3 = Wide

**D. BEAK**

3

1 = Obtuse

2 = Acute

3 = Acuminate

**E. BEAK WIDTH**

2

1 = Narrow

2 = Medium

3 = Wide

**F. GLUME LENGTH**

2

1 = Short (ca. 7mm)

2 = Medium (ca. 8mm)

3 = Long (ca. 9mm)

**G. WIDTH**

2

1 = Narrow (ca. 3mm)

2 = Medium (ca. 3.5mm)

3 = Long (ca. 4mm)



## 13. SEED:

## A. SHAPE

- ☐ 1 = Ovate  
☐ 2 = Oval  
☐ 3 = Elliptical

## B. CHEEK

- ☐ 1 = Rounded  
☐ 2 = Angular

## C. BRUSH

- ☐ 2      1 = Short                      1 = Not Collared  
           2 = Medium                2 = Collared  
           3 = Long

## D. CREASE

- ☐ 2      1 = Width 60% or less of Kernel  
           2 = Width 80% or less of Kernel  
           3 = Width Nearly as Wide as Kernel

- ☐ 1      1 = Depth 20% or less of Kernel  
           2 = Depth 35% or less of Kernel  
           3 = Depth 50% or less of Kernel

## E. COLOR

- ☐ 1 = White  
☐ 2 = Amber  
☐ 3 = Red  
☐ 4 = Other (Specify) \_\_\_\_\_

## F. TEXTURE

- ☐ 2      1 = Hard  
           2 = Soft  
           3 = Other (Specify) \_\_\_\_\_

## G. PHENOL REACTION (See Instructions)

- ☐ 4      1 = Ivory                      4 = Dark Brown  
           2 = Fawn                    5 = Black  
           3 = Light Brown

## H. SEED WEIGHT

- ☐ 3 ☐ 8      g/1000 Seed (Whole number only)

## I. GERM SIZE

- ☐ 2      1 = Small  
           2 = Midsize  
           3 = Large

## 14. DISEASE: PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

(0 = Not Tested    1 = Susceptible    2 = Resistant    3 = Intermediate    4 = Tolerant)

- |   |   |
|---|---|
| <input type="checkbox"/> 0 Stem Rust ( <i>Puccinia graminis</i> f. sp. <i>tritici</i> ) | <input type="checkbox"/> 4 Leaf Rust ( <i>Puccinia recondita</i> f. sp. <i>tritici</i> )                      |
| <input type="checkbox"/> 4 Stripe Rust ( <i>Puccinia striiformis</i> )                  | <input type="checkbox"/> 0 Loose Smut ( <i>Ustilago tritici</i> )   |
| <input type="checkbox"/> 0 Tan Spot ( <i>Pyrenophora tritici-repentis</i> )             | <input type="checkbox"/> 0 Flag Smut ( <i>Urocystis agropyri</i> )  |
| <input type="checkbox"/> 0 Halo Spot ( <i>Selenophoma donacis</i> )                     | <input type="checkbox"/> 0 Common Bunt ( <i>Tilletia tritici</i> or <i>T. laevis</i> )                        |
| <input type="checkbox"/> 0 <i>Septoria nodorum</i> (Glume Blotch)                       | <input type="checkbox"/> 0 Dwarf Bunt ( <i>Tilletia controversa</i> )   |
| <input type="checkbox"/> 0 <i>Septoria avenae</i> (Speckled Leaf Disease)               | <input type="checkbox"/> 0 Karnal Bunt ( <i>Tilletia indica</i> )   |
| <input type="checkbox"/> 1 <i>Septoria tritici</i> (Speckled Leaf Blotch)               | <input type="checkbox"/> 4 Powdery Mildew ( <i>Erysiphe graminis</i> f. sp. <i>tritici</i> )                  |
| <input type="checkbox"/> 0 Scab ( <i>Fusarium</i> spp.)                                 | <input type="checkbox"/> 0 "Snow Molds"   |
| <input type="checkbox"/> 0 "Black Point" (Kernel Smudge)                                | <input type="checkbox"/> 0 Common Root Rot ( <i>Fusarium</i> , <i>Cochliobolus</i> and <i>Bipolaris</i> spp.) |
| <input type="checkbox"/> 0 Barley Yellow Dwarf Virus (BYDV)                             | <input type="checkbox"/> 0 Rhizoctonia Root Rot ( <i>Rhizoctonia solani</i> )                                 |
| <input type="checkbox"/> 0 Soilborne Mosaic Virus (SBMV)                                | <input type="checkbox"/> 0 Black Chaff ( <i>Xanthomonas campestris</i> pv. <i>translucens</i> )               |
| <input type="checkbox"/> 0 Wheat Yellow (Spindle Streak) Mosaic Virus                   | <input type="checkbox"/> 0 Bacterial Leaf Blight ( <i>Pseudomonas syringae</i> pv. <i>syringae</i> )          |
| <input type="checkbox"/> 0 Wheat Streak Mosaic Virus (WSMV)                             | <input type="checkbox"/> 0 Other (Specify) _____  |
| <input type="checkbox"/> 0 Other (Specify) _____  | <input type="checkbox"/> 0 Other (Specify) _____  |
| <input type="checkbox"/> 0 Other (Specify) _____  | <input type="checkbox"/> 0 Other (Specify) _____  |
| <input type="checkbox"/> 0 Other (Specify) _____  | <input type="checkbox"/> 0 Other (Specify) _____  |

## 15. INSECT: (0 = Not Tested    1 = Susceptible    2 = Resistant    3 = Intermediate    4 = Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

- |  |  |
|--|--|
| <input type="checkbox"/> 4 Hessian Fly ( <i>Mayetiola destructor</i> )   | <input type="checkbox"/> 0 Other (Specify) _____ |
| <input type="checkbox"/> 0 Stem Sawfly ( <i>Cephus</i> spp.)             | <input type="checkbox"/> 0 Other (Specify) _____ |
| <input type="checkbox"/> 0 Cereal Leaf Beetle ( <i>Oulema melanopa</i> ) | <input type="checkbox"/> 0 Other (Specify) _____ |

15. INSECT: (continued)    0 = Not Tested    1 = Susceptible    2 = Resistant    3 = Intermediate    4 = Tolerant

PLEASE SPECIFY BIOTYPE (Where Needed)

☐

Russian Aphid (*Diuraphis noxia*)

☐

Other (Specify) \_\_\_\_\_

☐

Greenbug (*Schizaphis graminum*)

☐

Other (Specify) \_\_\_\_\_

☐

Aphids

☐

Other (Specify) \_\_\_\_\_

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S)  WestBred, LLC	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  BZ 698-31	3. VARIETY NAME  Nick
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)  8111 Timberline Drive Bozeman, MT 59718-8184 USA	5. TELEPHONE (Include area code)  (406) 587-1218	6. FAX (Include area code)  (406) 586-8247
7. PVPO NUMBER  <b>2005 00144</b>		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

**PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.